VERITY SYSTEMS

COMPLETE SOLUTIONS FOR ON-DEMAND CD & DVD PRODUCTION

OptiPrinter Pro

Photo-Quality CD/DVD Inkjet Printer

OPERATING & MAINTENANCE MANUAL

Thank you for purchasing a Verity Systems OptiPrinter PRO

OPERATING & MAINTENANCE MANUAL

Document Reference No. TP 000 120 (Rev 1.01)

Production Standard

ZZ 004 821

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WARNING

To avoid electrical shock hazards, unit covers should only be removed by authorized personnel.

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SECTION 1: INTRODUCTION

1.1 Overview

Verity Systems, world leading developers & manufacturers of optical disc duplication & printing systems, has launched a brand new, drawer mechanism CD/DVD printer: the OptiPrinter PRO.

Working in partnership with Hewlett-Packard, the OptiPrinter PRO brings professional print quality to the in-house production of CDs, DVDs, CD Business Cards and Mini CDs, delivering outstanding photo quality images directly onto the surface of discs, enabling customers to choose colorful backgrounds and images that reflect their company.

What's more, the OptiPrinter PRO has been specifically designed to provide maximum versatility and high-speed printing and can be used in a variety of settings. The PC-based OptiPrinter PRO offers professional desktop printing for the low volume/small business user, while the OptiPrinter PRO can also be used in conjunction with an autoloader or automated disc duplicator for fast, unattended printing of greater quantities.

1.2 Features

- Professional, photo quality CD & DVD inkjet printer
- Desk-top printer
- Combine with autoloader
- Direct to surface color inkjet printing
- Laser-sharp printing
- Perfect clean crisp graphics
- High speed printing
- 4800 dpi resolution with 16.7 million colors
- Uses standard, off-the-shelf standard HP print cartridges
- Hewlett-Packard inkjet Technology
- Ultra small ink drops (about 32 per dot)

1.3 Specifications

Minimum System Requirements:	Windows 2000: Pentium 133MHz, 64Mb RAM; Windows XP: Pentium 233 MHz, 128 Mb RAM
Power Requirement:	100 to 240 VAC, 50/60Hz
Environment:	Recommended operating temperature: 15 to 365 °C Recommended operating humidity: 20 to 80% RH non-condensing
Dimensions:	Width: 17.6" (447mm) Depth: 14" (356mm) Height: 6" (152.4mm) Net Weight: 5.5kg/12.12lbs (approx. without cartridges)
Media Support:	Prints directly onto the surface of inkjet printable 120mm CDs & DVDs, 86x61mm rectangular and 80mm x 61mm & 80mm x x63mm saddle CD business cards & 80mm mini discs
Connectivity:	Bi Universal Serial Bus. 2.0 Full Speed (USB), centronics parallel IEEE-1284 compliant.
Maximum Resolution:	Black: Up to 1200 dpi

	Color: 4800 x 1200 optimized dpi color printing on premium photo papers with 1200 x 1200 dpi input dpi resolution. Full color spectrum of 16.7 million colors. HP PhotoREt III Color Management System
Print Speed:	25% mono coverage @ normal, text quality approx.* 16 seconds per disc 25% mono coverage @ normal, inkjet quality approx.* 19 seconds per disc 100% full color coverage @ normal, inkjet quality approx.* 24 seconds per disc 100% full color coverage @ best Inkjet (PhotoRet) approx.* 52 seconds per disc 100% full color coverage @ photo quality (PhotoRet), approx.* 134 seconds per disc **(*Speeds given are approximations and are dependant on file size, disc coverage and processing speed)**
Cartridges:	Dual Ink Cartridges: Standard HP Black Print Cartridge C6656; Standard HP Tri-Color Print Cartridge C6657 or Standard HP Photo Print Cartridges C6658

SECTION 2: BOX CONTENTS

Carefully remove your Verity Systems OptiPrinter PRO from its shipping carton and verify that all parts are present. If there are missing or damaged parts contact *Verity Systems* or an authorized distributor immediately.

You should find the following:

- *Verity Systems* OptiPrinter PRO
- Power Cable
- USB Cable
- Quick Start Guide
- CD, including Printer Driver, User Manual, Test Image, Templates
- 2 Blank Printable CDs
- One Black & One Color Cartridge
- Discus Graphics Software CD

Note:
Be sure to remove all pieces of protective tape. Remove the tape holding down the printer lid. Open the lid and remove the piece of foam holding the CD Tray in place.

Note:
If your Verity Systems OptiPrinter PRO is damaged during shipment, please contact the freight carrier first, then, contact your distributor or Verity Systems. You should save your shipping materials so that if the need arises, you can return your OptiPrinter PRO for service. This packaging was designed specifically for shipping your OptiPrinter PRO. Other packaging may not be suitable.

SECTION 3: POWER ON

1. Connect the power cable to the printer and plug into the power supply.
2. Power up the OptiPrinter PRO by pressing the Power Button. (See Fig. 1)
3. The Power Button light will flash for a short period then remain illuminated.

SECTION 4: BUTTONS & LIGHTS

The Printer Buttons let you turn the printer on & off, cancel a print job, open & close tray or resume printing. The lights give you visual clues about the status of the printer.

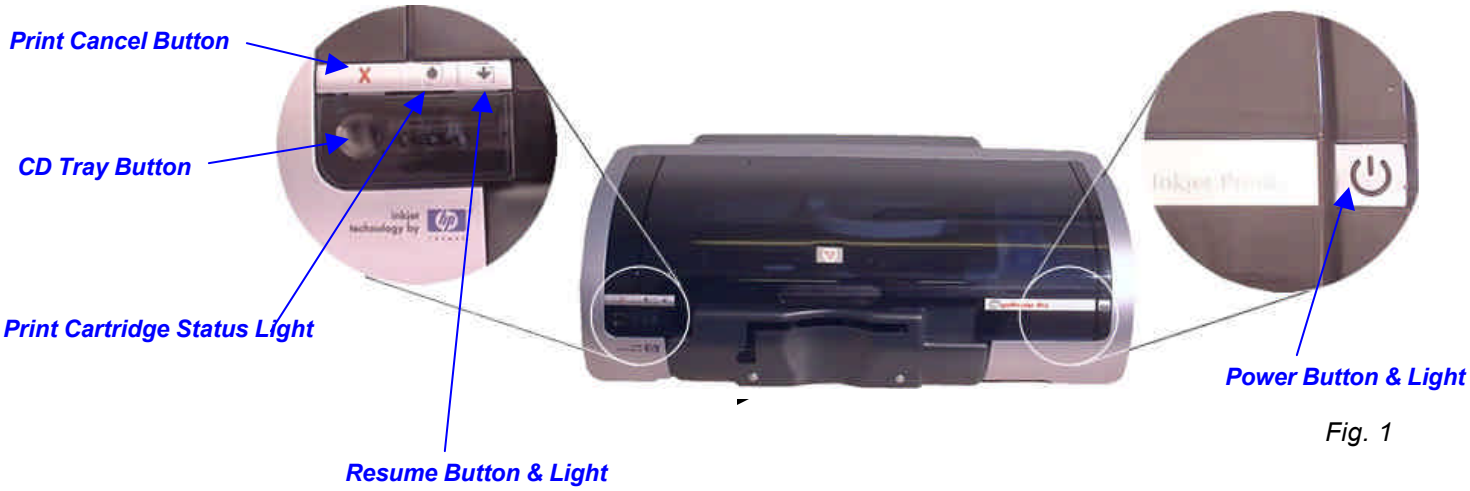


Fig. 1

4.1 Print Cancel Button

Pressing the Print Cancel Button cancels the current print job.

3.2 Print Cartridge Status Light

This light flashes when a print cartridge is low in ink or incorrectly installed, or the printer's top cover is open.

4.3 Resume Button & Light

This light will flash when an action is required such as loading a CD or clearing a CD jam. When the action is completed, press the Resume Button to continue printing.

The OptiPrinter Pro also has a **multiple print capability**. If a multiple print command is sent from a PC, the first CD is printed as normal. Then when the CD tray is ejected, the resume light will flash. Place a new CD into the tray and press the Resume button. The CD tray will retract and the CD will be printed and so on for the number of copies requested.

4.4 Power Button & Light

The Power Button turns the printer on and off. It may take a few seconds for the printer to turn on after you press the Power button. The green light flashes when the printer is processing.

Caution!
Always use the Power button to turn the printer on and off. Using a power strip, surge protector, or a wall-mounted switch to turn the printer on and off may cause printer failure.

4.5 CD Tray Button
Pressing this button will slide the CD tray back and forth into the printer.

SECTION 5: INSERTING A CD INTO THE PRINTER

5.1 Standard (120mm) CDs & DVDs

With your OptiPrinter PRO switched on, push the CD Tray Button on the front of the printer (see Fig.1 on the previous page) and the CD tray will slide out. Place a CD onto the tray ensuring that the disc sits against the two pins at the front of the tray as shown below in Fig. 2

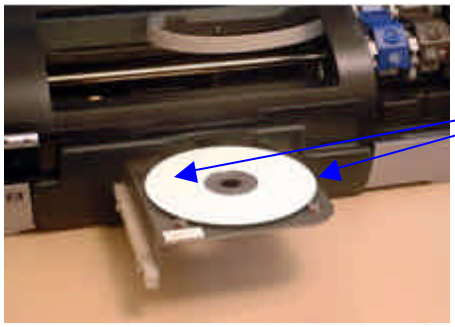


Fig. 2

When you send your image to printer, the CD Tray will tray slide back into the printer and printing will commence.

5.2 CD Business Cards & Mini Discs (option)

The OptiPrinter PRO will also print directly onto inkjet printable CD Business Cards (rectangular and saddle/hockey rink) and Mini Discs, via the special adaptors (Fig. 3), which can be purchased separately (see your dealer for details). The adaptors come in two parts.

1. Open the CD tray by pressing the CD tray button on the front of the printer.
2. Place Part 1 of the adaptor onto the CD tray making sure that the 2 pins on the tray fit snugly into the corresponding holes on the adaptor part (Fig. 4).

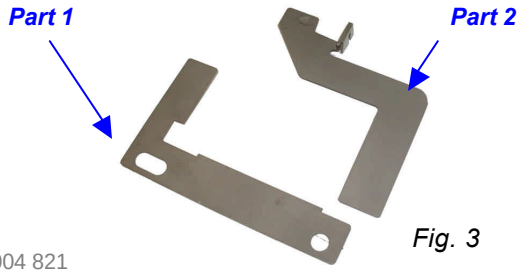


Fig. 3

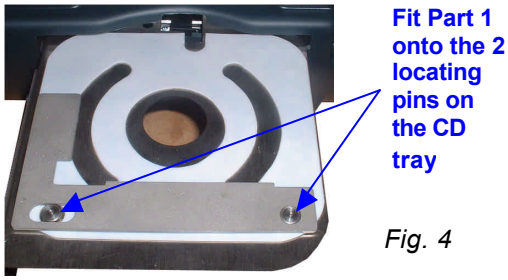


Fig. 4

3. Open the printer cover
4. Using your hand, slowly slide the CD tray back into the printer until approximately 1 inch of the CD tray remains protruding from the front of the printer.
5. Fit Part 2 of the adaptor matching the pin on the adaptor to the hole on the CD tray (Fig 5 & Fig. 6).

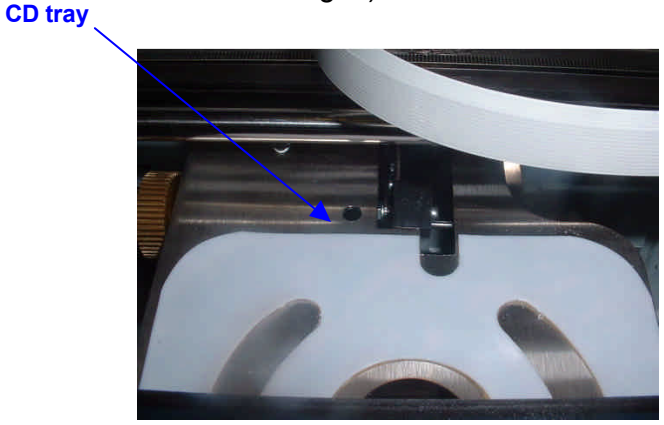


Fig. 5

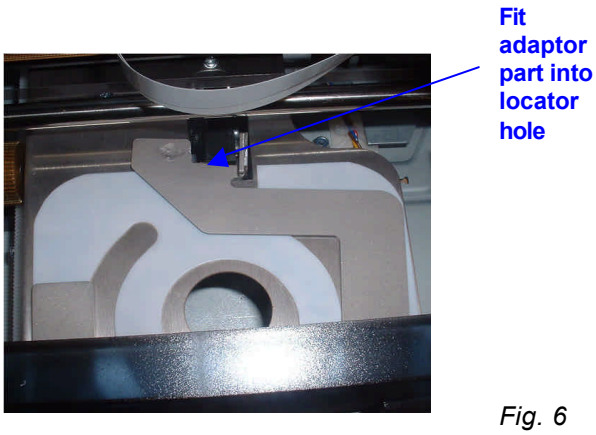


Fig. 6

6. Close the printer cover and press the CD tray button so that the CD tray slides out.
7. Place the inkjet printable CD Business Card or Mini Disc into the adaptor, ensuring that it sits completely flat (Fig. 6).
8. As the tray slides back into the printer, Part 2 of the adaptor closes against the discs and holds it securely in place for printing.

SECTION 6: INSERTING/CHANGING THE PRINT CARTRIDGES

1. Press the Power Button to turn on the printer
2. Open the top cover
3. Lift the print cartridge latch to the open position (Fig. 7)
4. Slide the print cartridge out of the cradle (Fig. 8)
5. Remove the plastic tape from the print cartridge (Fig. 9)
6. Hold the cartridge so that the copper strip is on the bottom and rear
7. Slide the cartridge firmly into the cradle, color on the left, black on the right. (Fig. 10)
8. Push down the print cartridge latch until it snaps closed. Close the top cover.

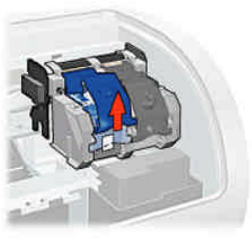


Fig. 7

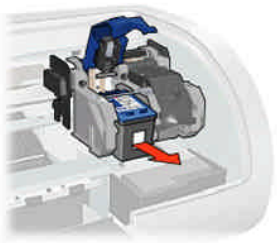


Fig. 8

Fig. 9

Fig. 10

SECTION 7: INSTALLING THE PRINTER SOFTWARE

Note:
*Your OptiPrinter PRO **should not** be connected to your PC during the initial software installation. If connected, **remove the USB and power cables from the printer**. There may be variations in the following instructions depending on operating system (2000 or XP) and configuration.*

1. Place the Printer Driver CD into the CD-ROM drive of your PC. The **Verity_OptiPrinter Pro** installation wizard should automatically start.
2. Follow the on-screen instructions, clicking **Next** when prompted. When prompted, click **Install** to begin installation.
3. The **Digital Signature Not Found** message box will appear (see Fig.11). You will be asked if you wish to continue installation, select **Yes**. In Windows XP, select **Continue Anyway**.
4. On the final screen click **Finish**.
5. Connect the OptiPrinter Pro to your PC via the USB cable.
6. Connect the power cable to the back of the OptiPrinter Pro and plug into the power supply. Switch on the printer.
7. If the **Digital Signature Not Found** message box appears again, select **Yes** to continue installation. In Windows XP, select **Continue Anyway**.
8. The **Found New Hardware** box will appear on screen, which will search for the driver. In Windows XP select **No, not at this time** and click **Next**.
9. At the next box, select **Install the software automatically (Recommended)** and click **Next**.
10. If the **Digital Signature Not Found** message box appears again, select **Yes** to continue installation. In Windows XP, select **Continue Anyway**.
11. When prompted, click **Finish**.

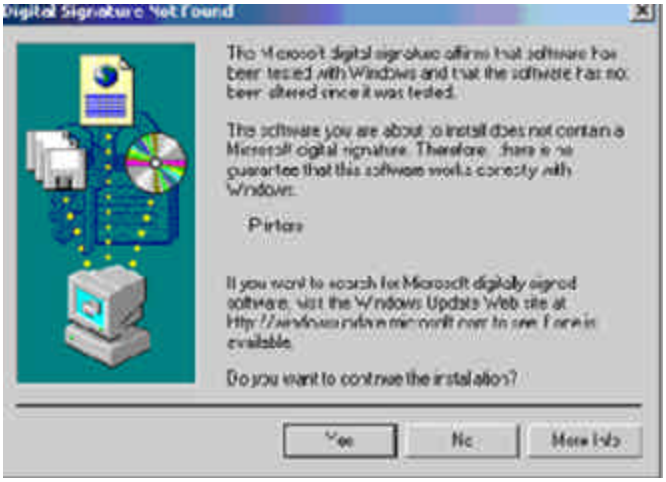


Fig. 11

Note:
The message, which appears above, is merely precautionary from Windows and it is not necessary to stop the installation.

Note:

*If your PC does not recognize the new OptiPrinter PRO hardware when you first connect it to your PC, you should load the print driver via the **Add Printer** icon on your Printer settings:*

a. Place the Print Drive CD into your PC's CD-ROM drive
b. On you PC's desktop, select **Start**, **Settings** and **Printers**
c. Double click the **Add Printer** icon and follow the on screen instructions
d. When prompted, select **Local Port**
e. When the Wizard asks for the name of the printer, click the *Have Disk* button and navigate to the **enu/drivers/win2k_xp/OptiPrinter_Pro.inf** file on the CD-ROM and select **Open** and then **OK**.
f. The driver will begin to install on your PC.
g. Whenever prompted click **Next**.
h. When complete, select **Finish** and the Verity Systems OptiPrinter PRO print driver icon will appear in your printer settings
i. The **Digital Signature Not Found** message box (see Fig. 11) will appear. You will be asked if you wish to continue installation, select **Yes**. In Windows XP, select **Continue Anyway**.

SECTION 8: INSTALLING DISCUS (Graphics Software)

Insert the Discus CD into your CD-ROM and follow the on-screen instructions.

SECTION 9: USING DISCUS SOFTWARE

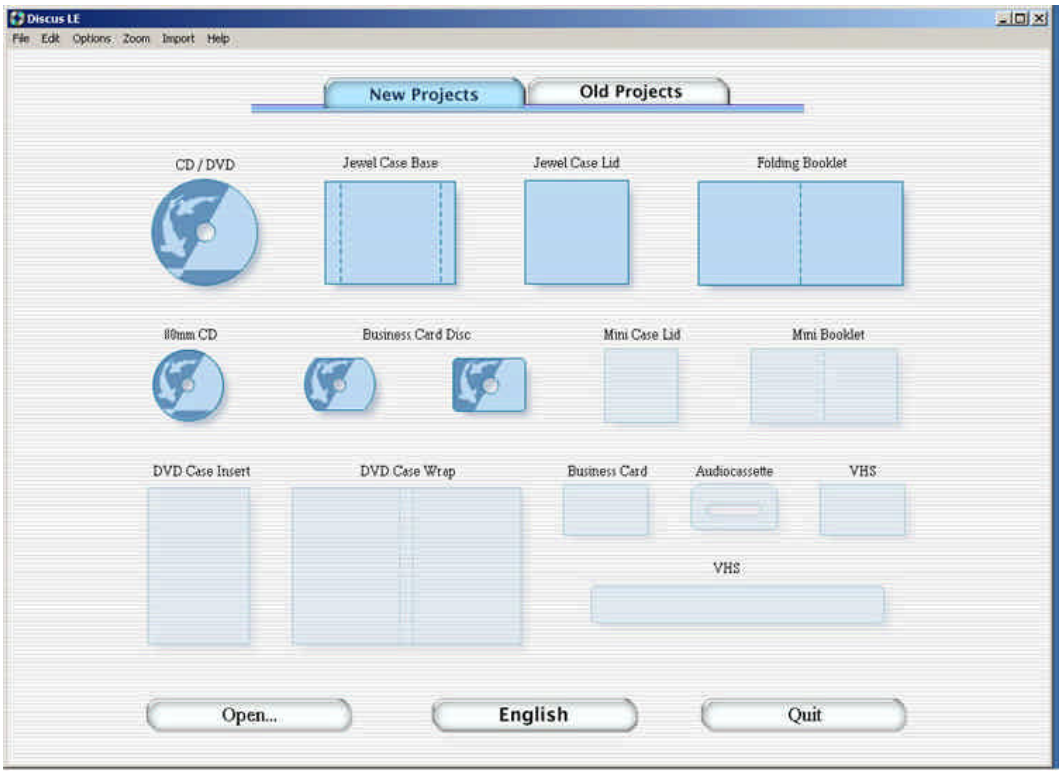
Note:

Before using Discus, you need to disable the OptiPrinter Pro's built in mask.

*a. On your desktop, click **Start**, **Settings** and then open your **Printers** folder.*
*b. Right click the Verity Systems OptiPrinter PRO icon, and select **"Properties"** from the popup menu.*
*c. Click **"Printing Preferences…"** and open the "**Mask settings"** tab*
*d. Unclick the **"Enable Masking"** checkbox and click **OK***

Open Discus by clicking on its icon on your desktop. The screen on the next page will open.

Select a label type



Use the tabs along the top to create your artwork

Fig.12

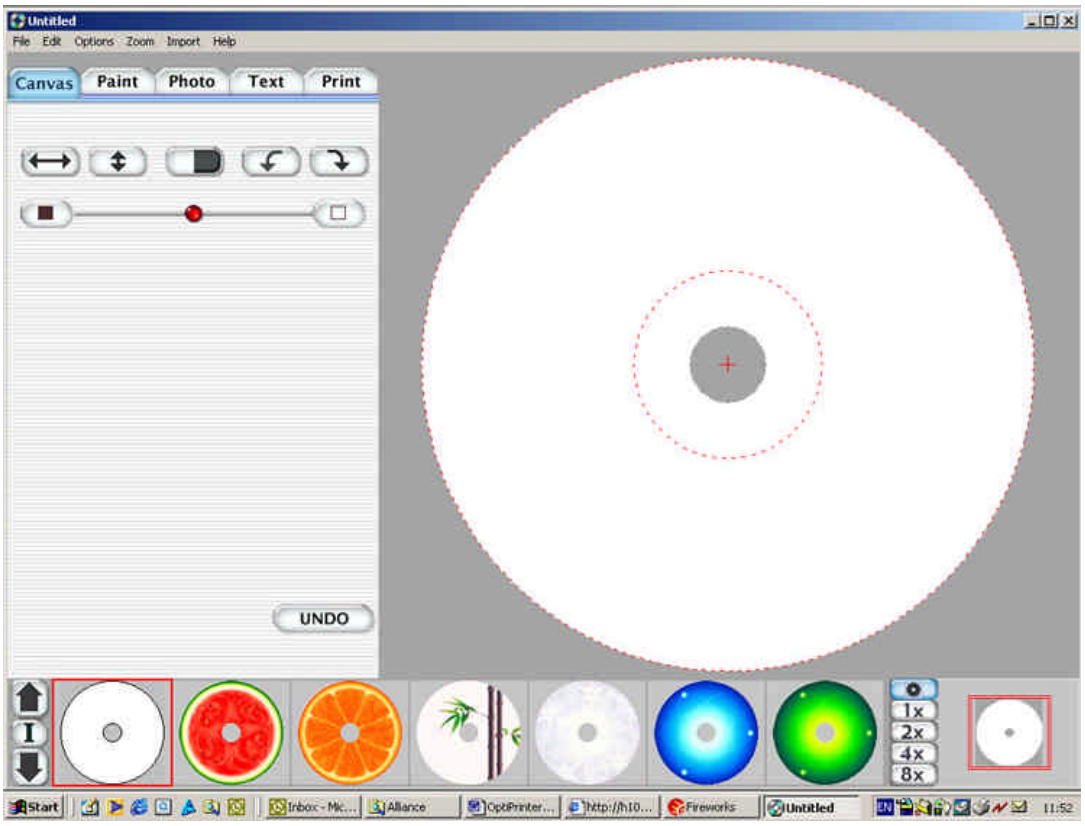


Fig. 13

Canvas: Select a blank canvas or choose from a wide selection of backgrounds included with Discus.

Paint: Draw and color your own vector shapes

Photo: Import jpeg, gif, tiff or BMP image files

Text: Add & manipulate text to your design

Note:

Full details of how to use Discus can be seen by clicking the Help Button on the Discus interface.

Once your artwork is complete, select the “Print” tab

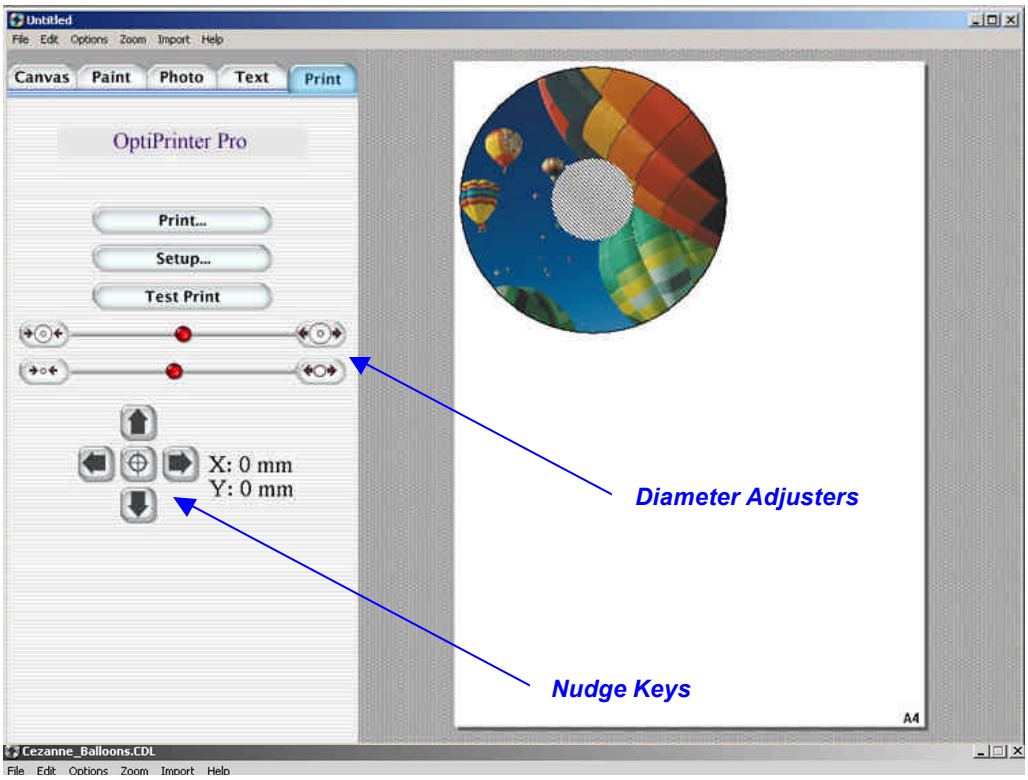


Fig. 14

Choose the *OptiPrinter Pro* from the Select template menu

Next, select **Setup….** Choose the Verity Systems OptiPrinter PRO from the drop-down list of printers and ensure the **Paper Size** is set to **A4 (210 x 297mm)**, **Source** is set at **Upper Tray** and that **Orientation** is set at **Portrait**.

Note:

It is important that these settings are adhered to when printing with the OptiPrinter PRO.

To ensure that your image is positioned correctly, select “Test Print”.

A series of black circles will print onto the CD as shown in Fig. 15

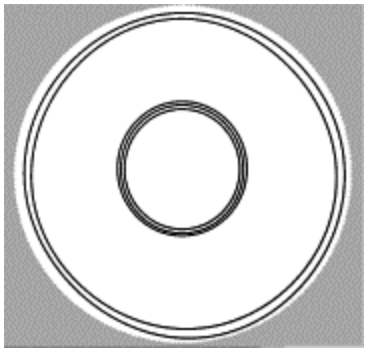


Fig. 15

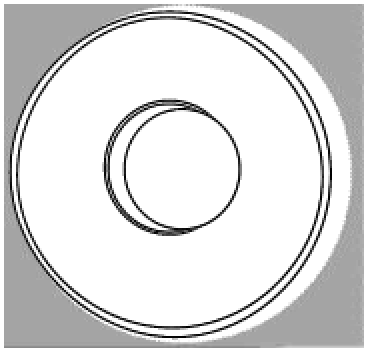


Fig. 16

You may find that the circles do not print centrally onto the disc as shown in Fig. 16, in which case you need to adjust the position of the template in Discus.
Use the nudge keys (as shown in Fig. 14 on the previous page) to move your template back & forth and up & down until your test prints centrally onto your disc.

Once the test print has been perfected, you are now ready to print the artwork you created.
Place a blank CD into the CD tray. On the print tab, select “Print”. Ensure that the OptiPrinter PRO has been selected from the Print Properties and select “Print” again. Your OptiPrinter PRO will begin to print your disc.

Note:

The printing surface on printable discs sometimes differs from manufacturer to manufacturer. Use the Diameter Adjuster (see Fig.14 on previous page) to alter the printable area of our disc.

SECTION 10: SETTING PRINTER PREFERENCES

You can choose a number of printing options on your OptiPrinter PRO from the Printer Preferences menu.

10.1 Paper/Quality

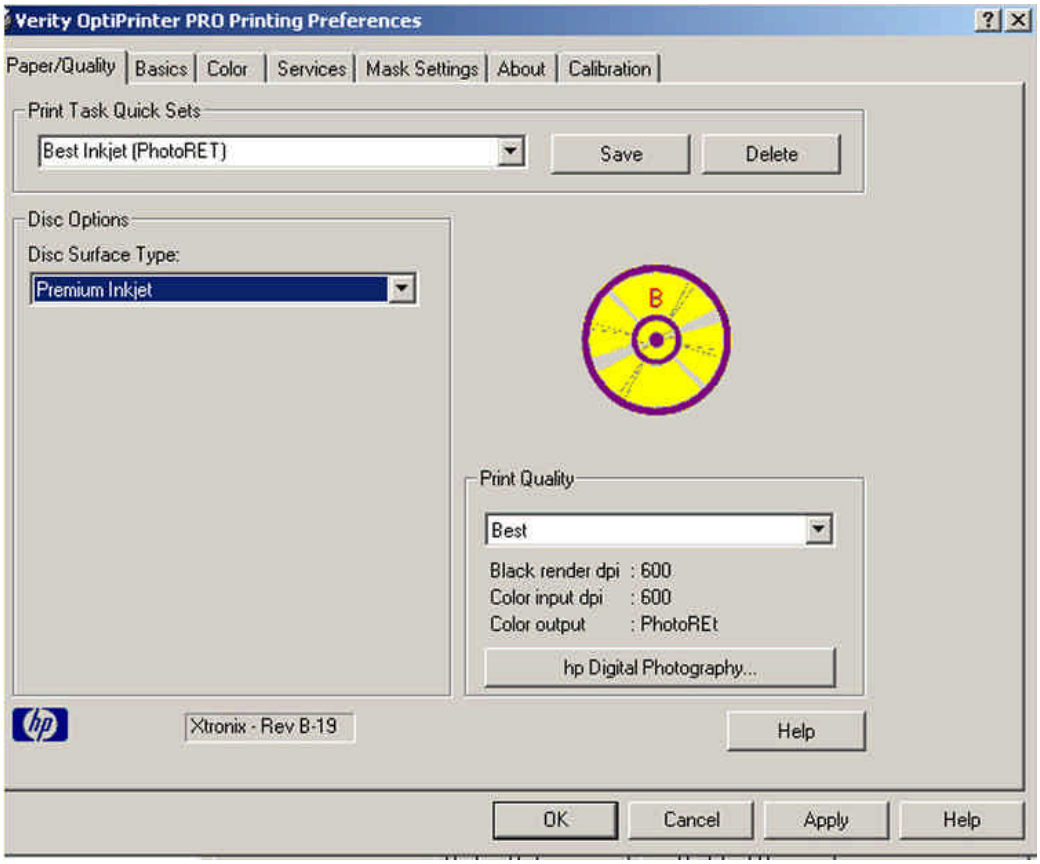


Fig. 17

This screen allows you to select the appropriate output quality for your disc.

Disc Surface Type
Select the type of surface you want to print on from this drop down list. Choose from:
White Inkjet; Premium Inkjet; Other Inkjet; Premium Glossy; Premium Plus Glossy; Premium Matt; Colorfast Glossy; Glossy; 4800x1200dpi; Other Photo Quality; Text Quality

The choice you make here will depend on the image you wish to print. If you are printing basic text, select *Text Quality*. If printing basic graphics, select *White Inkjet*. For images where only the very best will do, such as high-resolution photos, select *Premium Inkjet* or *Premium Matt* or *Glossy*.

Print Quality

There are 6 options to choose from:

- **FastDraft:** Prints at the fastest speed while using the least amount of ink.
- **Fast Normal:** Prints faster then *Normal* mode and at a higher quality than *FastDraft*.

- **Normal:** Prints faster than *Best* and at a higher quality than *Fast Normal*.
- **Best:** Provides high quality printing
- **Maximum dpi:** Provides the highest quality printing but requires longer to print than *Best* and requires a large amount of disk space.

Print Task Quick Sets

In addition to using the *Disc Surface Type* and *Print Quality* options to set your output quality, the OptiPrinter PRO is pre-programmed with nine print settings:

- Default
- Premium Photo Quality Matt (4800x1200 dpi)
- Premium Photo Quality Glossy (4800x1200 dpi)
- Photo Quality Matt (PhotoREt)
- Photo Quality Glossy (PhotoREt)
- Best Inkjet (PhotoREt)
- Normal Inkjet (600x600 dpi)
- Normal Text (300x300 dpi)
- Fast Text (300x300 dpi)

Selecting a setting will automatically select the most suitable disc surface and print quality for the job in hand.

> **Example**
> If you select *Premium Photo Quality Matt (4800x1200 dpi)*, the *Disc Surface Type* is automatically set to *Premium Matt* whilst the *Print Quality Type* is automatically set to *Maximum dpi*.

You can delete these pre-programmed settings and even create your own using the *Save* and *Delete* buttons.

10.2 Basics

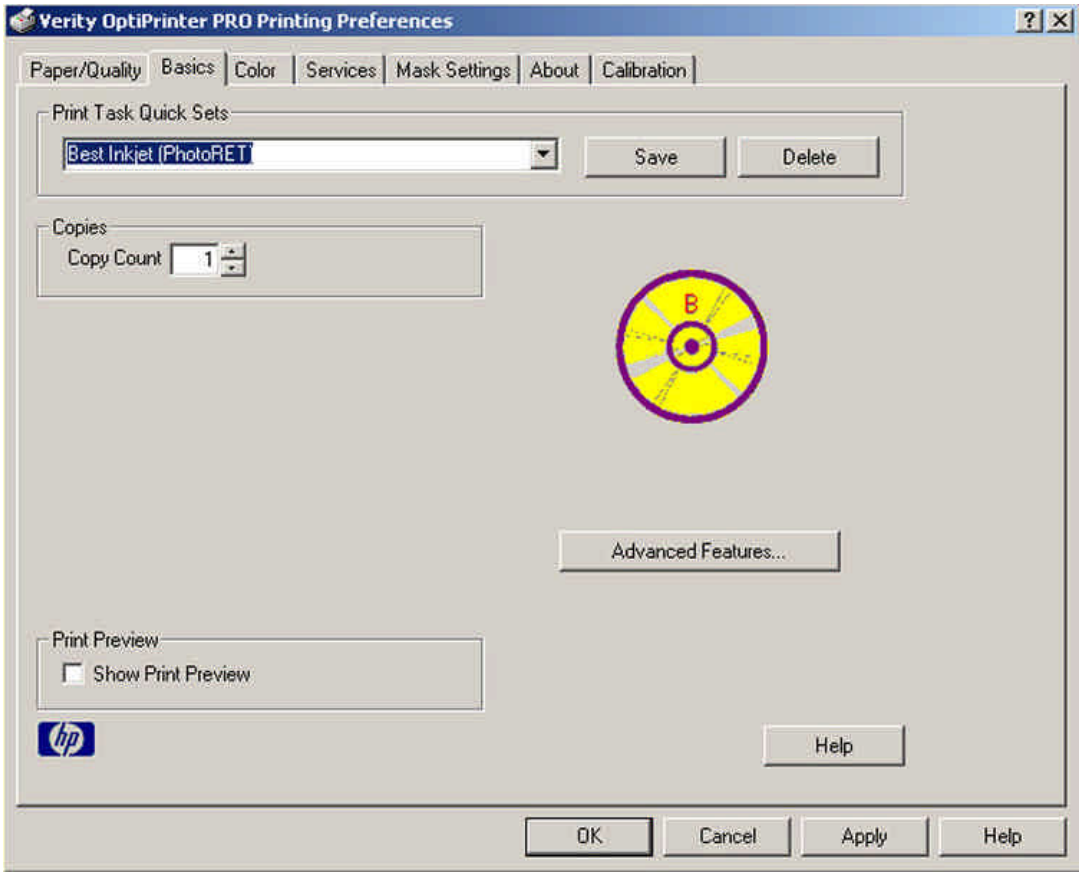


Fig. 18

This tab allows to you:

a. Select multiple copies to print in the *Copies* field.

b. Click the *Print Preview*checkbox and a preview of your print image will automatically appear on screen each time you print.

c. Select Advanced Features and you are presented with the following options (Fig.19):

Ink Volume: Select this feature to lessen or increase the amount of ink used to print a document.
Dry time: Select this feature to increase the time the printer holds a document After printing if ink on your printed document smears.
Low Memory Mode: Select this option to allow the draft to be printed if your computer does not have enough memory or disk space to print a document.

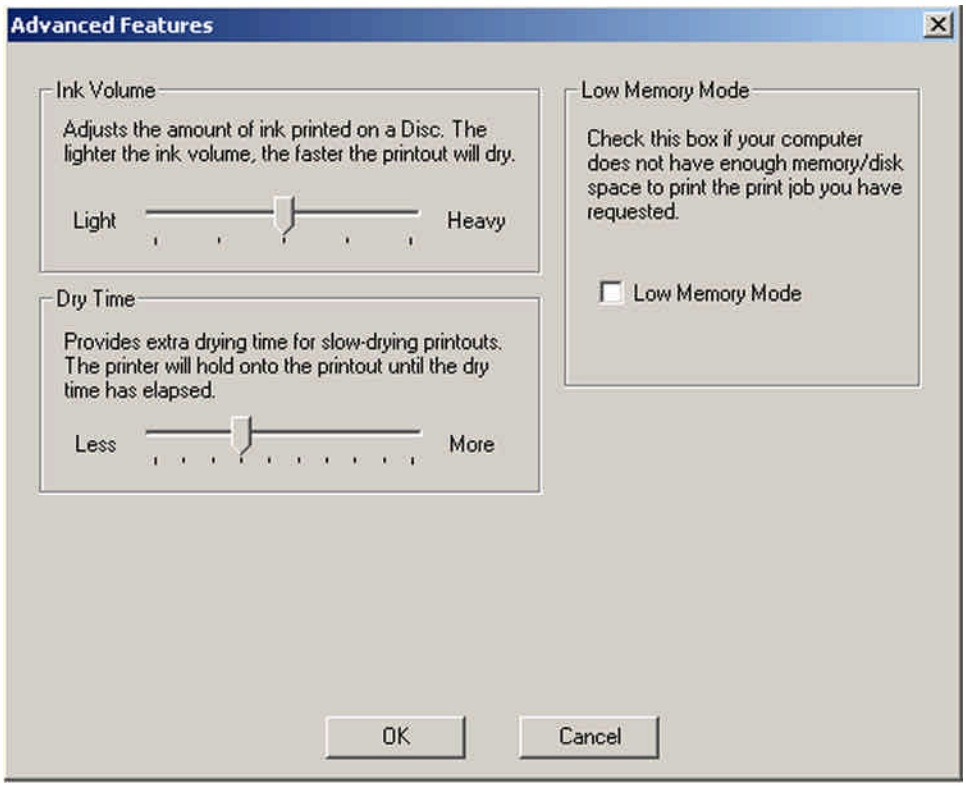

Advanced Features
Ink Volume
Adjusts the amount of ink printed on a Disc. The lighter the ink volume, the faster the printout will dry.
Light
Heavy
Dry Time
Provides extra drying time for slow-drying printouts. The printer will hold onto the printout until the dry time has elapsed.
Less
More
Low Memory Mode
Check this box if your computer does not have enough memory/disk space to print the print job you have requested.
Low Memory Mode
OK
Cancel

Fig. 19

10.3 Color

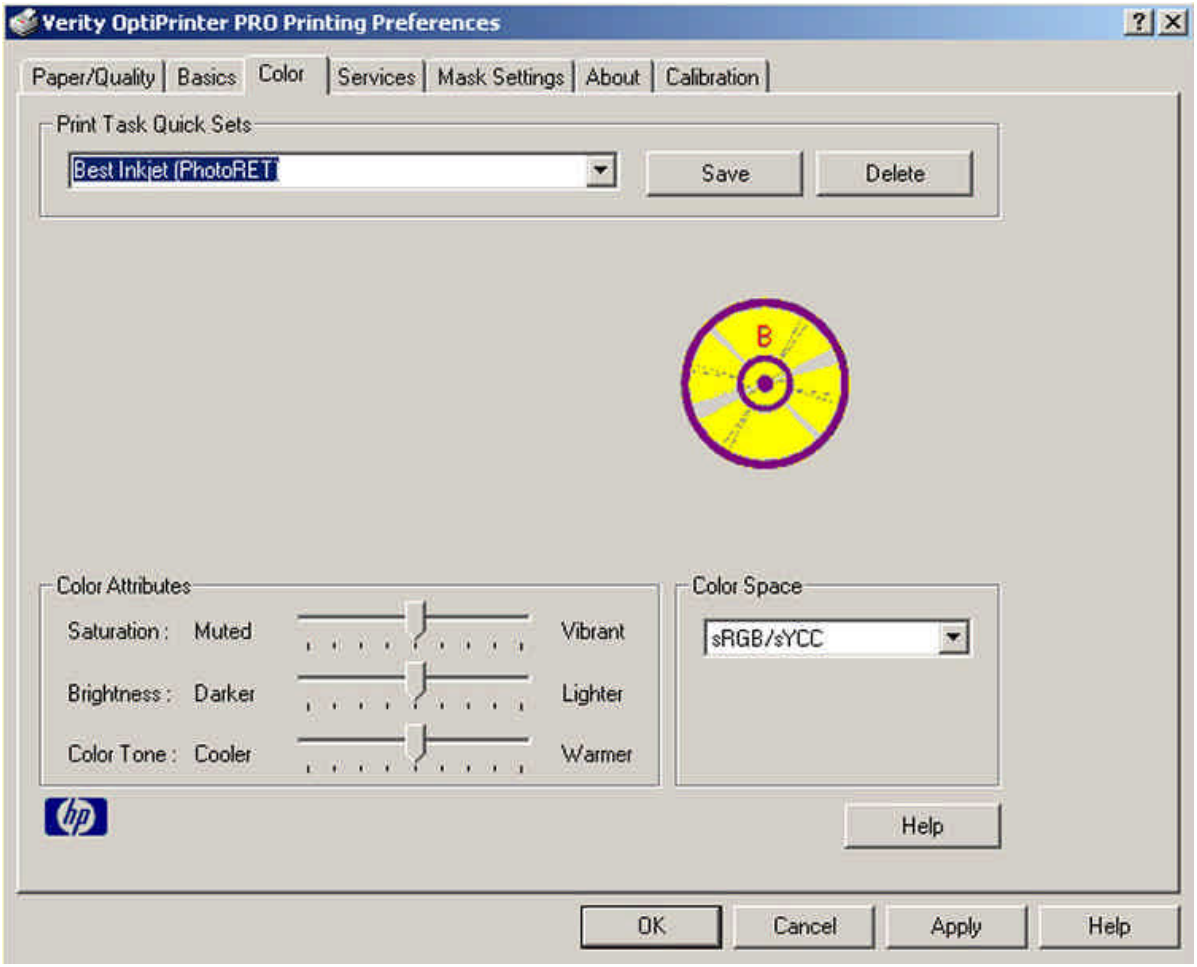


Fig. 20

Saturation: Intensity of printed color
Brightness: Lightness or darkness or printed colors
Color Tone: Warmth or coolness of printed colors
Color Space: Defines the range of colors that can be printed.
sRGB/sYCC is an appropriate color space for most print jobs.
Adobe RGB is an emerging color space that offers more colors than sRGB/sYCC, but which only works for images.

10.4 Services

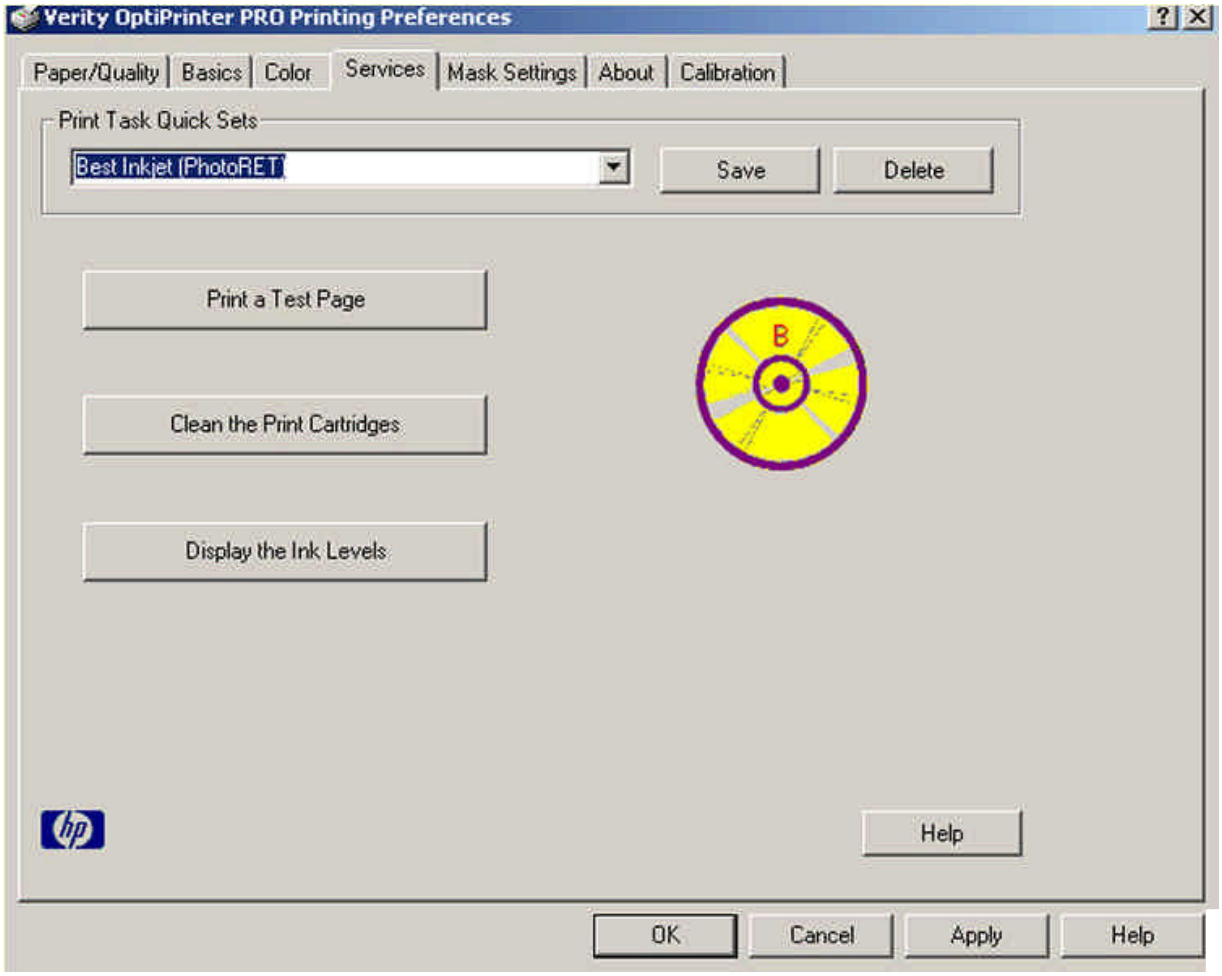


Fig. 21

Print a Test Page: Prints a test image onto a CD (ensure you have a disc in the OptiPrinter PRO before selecting this option).

Clean the Print Cartridges: Cleans the print cartridges & prints out a test image (Ensure you have a disc in the OptiPrinter PRO before selecting this option).

Display Ink Levels: Estimates the amount of ink left in each cartridge. (Displays only when printing)

10.5 Mask Settings

The OptiPrinter PRO's built in mask determines the printable area for your image and prevents your image from being printed outside the printable area of the CD media you are using or onto the CD tray of the printer itself.

This mask should be used when printing discs **using any design software program other Than the Discus software which is included with your printer**; for example, CorelDRAW or Photoshop.

Mask Type:	Select the mask that matches the media to which you wish to print on. Choose from the following: Standard CD/DVD (120mm) Business Card Rectangle (86x 61mm) Business Card Rectangle (80 x 61mm) Mini CD (80mm)
Enable Mask:	Click this checkbox to switch the OptiPrinter PRO's mask on or off. **IMPORTANT.** If you are using Discus software, you **MUST** switch off the mask.
Standard Area Setting:	Adjust the printable area of your design.
Hub Area Setting:	To print on the central hub of a CD, check this box and adjust dimensions accordingly.
Mask Origin:	To alter the origin of the mask when printing through a graphics package other than Discus.
Parameter Unit:	Select the size of unit you wish to make changes with, I.e., either 1mm or 0.1mm increments.

For more information on using the OptiPrinter PRO mask and using graphics software other than Discus, see Appendix A

10.6 Calibration

Your OptiPrinter PRO comes from the factory pre-calibrated to print the image in the center of the CD. However, during the life of the printer it may be necessary to recalibrate it to ensure a perfect image position on the CD. This tab allows you to fine-tune the position of the printed image with the CD.

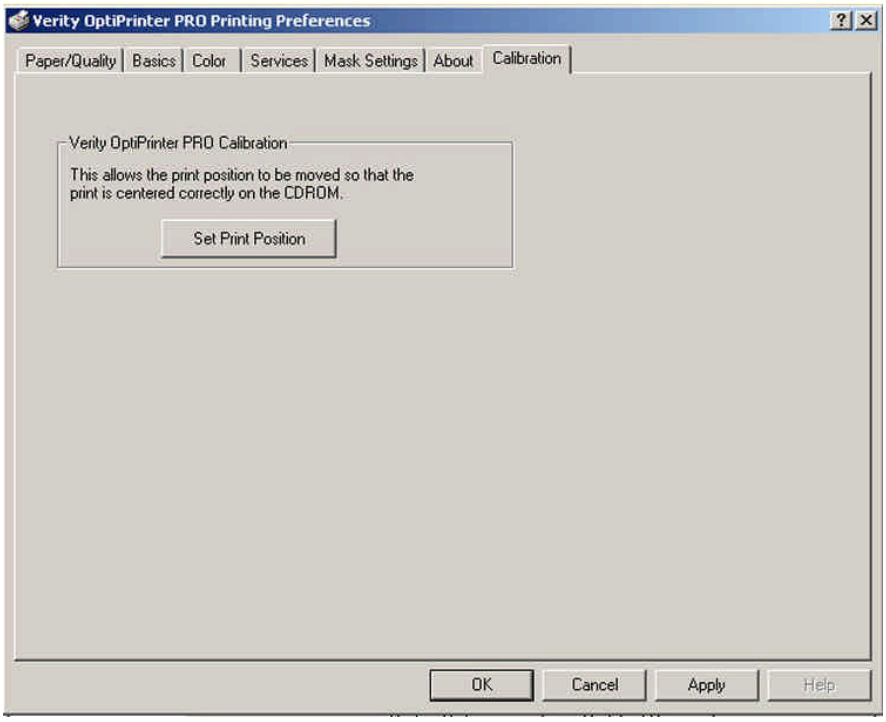


Fig. 23

Note:

In order to set the calibration, the OptiPrinter Pro must be attached to your PC via the USB cable. Calibration will not work if the printer is connected via the parallel port.

Click the *Set Print Position* button, the Calibration Screen appears (See Fig. 24).

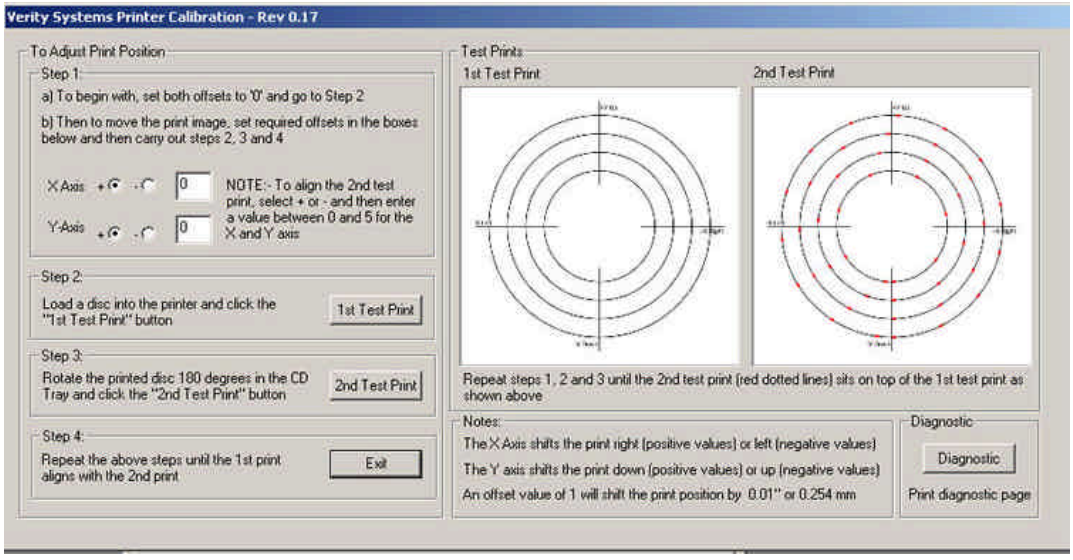
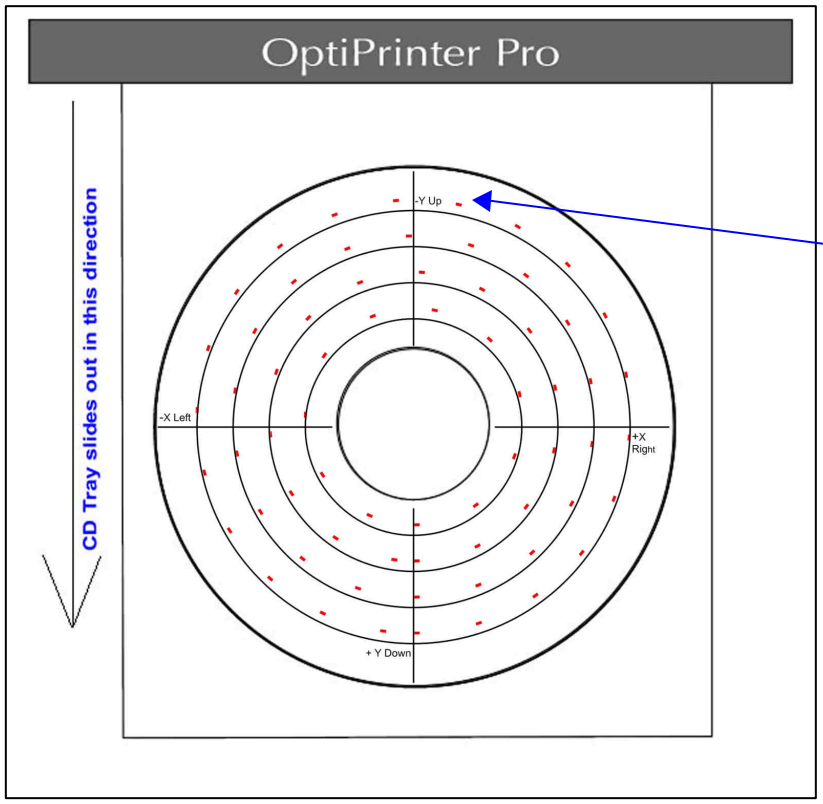

Verity Systems Printer Calibration - Rev 0.17
To Adjust Print Position
Step 1:
a) To begin with, set both offsets to '0' and go to Step 2
b) Then to move the print image, set required offsets in the boxes below and then carry out steps 2, 3 and 4
X Axis
Y-Axis
NOTE:- To align the 2nd test print, select + or - and then enter a value between 0 and 5 for the X and Y axis
Step 2:
Load a disc into the printer and click the "1st Test Print" button
1st Test Print
Step 3:
Rotate the printed disc 180 degrees in the CD Tray and click the "2nd Test Print" button
2nd Test Print
Step 4:
Repeat the above steps until the 1st print aligns with the 2nd print
Exit
Test Prints
1st Test Print
2nd Test Print
Repeat steps 1, 2 and 3 until the 2nd test print (red dotted lines) sits on top of the 1st test print as shown above
Notes:
The X Axis shifts the print right (positive values) or left (negative values)
The Y axis shifts the print down (positive values) or up (negative values)
An offset value of 1 will shift the print position by 0.01" or 0.254 mm
Diagnostic
Diagnostic
Print diagnostic page

Fig. 24

Follow the on screen instructions.

1. Step 1: Set both offsets to '0'. This is the default setting.
2. Step 2: Place a disc onto the CD tray and retract the tray into the printer. Click '1st Test Print'. A series of solid black circles will print onto the disc as shown in Fig. 24 on the previous page.
3. Step 3: rotate to discs 180 degrees in the CD tray and retract the tray once more into the printer. Click '2nd Test Print'. A series of broken, red circles will print onto the disc as shown in Fig. 24 on the previous page.
4. If the printer is in calibration, the 2nd Test Print should sit directly on top of the 1st. If this is not the case, the 'Offsets' need to be adjusted.
5. Adjust the Offset

Example 1

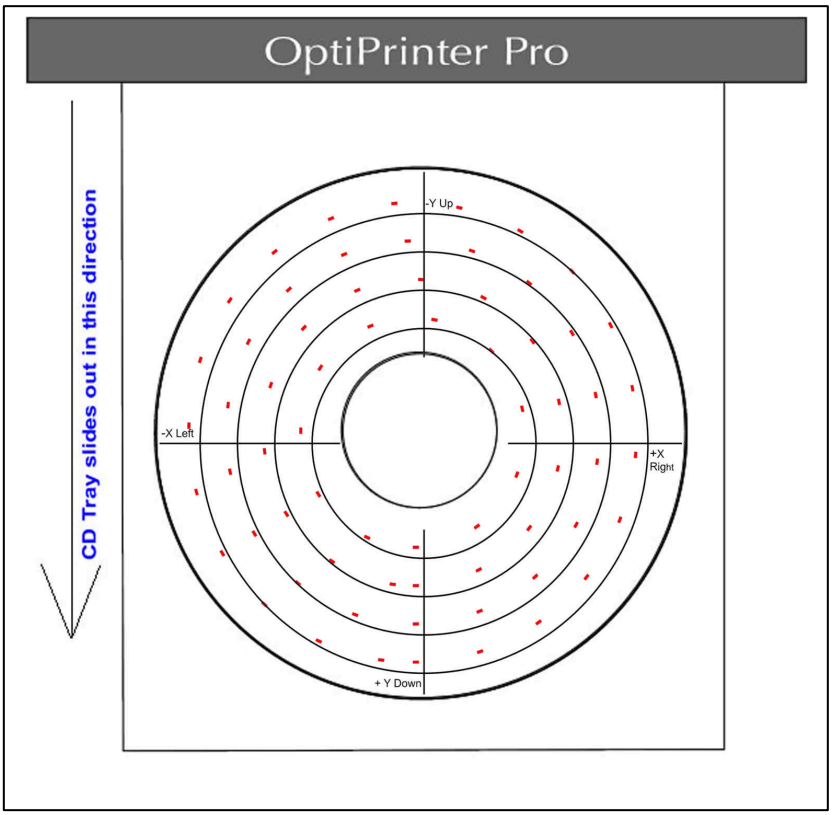

OptiPrinter Pro
CD Tray slides out in this direction
-Y Up
-X Left
+X Right
+ Y Down
2nd Test print (red broken circles) is printing too far down the Y-axis

Example 1

The 2nd test image prints out of line as shown in Example 1 (the red broken circles are printing perfectly on the X-Axis, but too far down on the Y-Axis). To bring the two test prints together you would need to adjust the Y-axis by a negative value.

Under Step 1 on the Calibration screen, select the negative ('-') check box next to the Y-axis and enter a value between 1 and 5. An offset value of 1 will move the print position by 0.01" or 0.254mm.

Example 2



Example 2

The 2nd test image prints out of line as shown in Example 2 (the red broken circles are printing too far right on the X-axis and too far down on the Y-axis). To bring the two test prints together you would need to adjust the X-axis by a negative value and the Y-axis by a negative value.

Under Step 1 on the Calibration screen, select the negative ('-') check box next to the X- axis and the Y-axis and enter a value in each between 1 and 5.

6. Once you have entered a value, repeat Steps 2, 3 and 4 until both Test prints align.

   Some trial an error will be required in order to get the alignment exactly right.

7. When you have completed the calibration, hit the *Exit* button, the numbers you have entered are stored inside the printer's memory so the calibration you have set will remain if the printer is powered down or disconnected from the PC.

SECTION 11: ERRORS

You can identify many common problems using the lights on the printer's control panel. The Following list highlights common errors and the recommended corrective measures:

Print Cancel Button
Print Cartridge Status Light
Resume Button & Light
Power Button light

1. Printer Cartridge light is On or Flashing

The top cover is open	Close the cover
Problem with print cartridge	Verify correct cartridge is installed and that installation is correct
Cartridges may be low in ink	If this is the case, the printer cartridge light will stop flashing once the top cover is opened or the printer is printing. The problem is not related to the ink volume if the light continues to flash when the top cover is opened.

2. Power Light is Flashing

The printer is preparing to print.	The light stops flashing when the printer has received all data.

3. All Lights are flashing

The printer may need to be restarted.
Press the Power Button to turn off the printer, then press the Power Button again to restart the printer.

If the lights continue to flash, press the Power Button to turn off the printer. Disconnect the printer from the power source. Reconnect the printer to the power source. Press the Power Button to turn on the printer.

SECTION 12: TECHNICAL SUPPORT

You should first attempt to get technical assistance from your dealer or distributor.

Verity Systems support personnel can be reached at:

VERITY SYSTEMS LTD
2 Eastern Road
Aldershot
Hampshire
GU12 4TD
United Kingdom

Tel: +44 (0) 1252 796901
Fax: +44 (0) 1252 316555
Email: uksupport@veritysystems.com
Open GMT Time

VERITY SYSTEMS, INC.
5441 Merchant Circle, Unit A
Placerville
California
95667
United States

Tel: (530) 626-9363
Fax: (530) 626-9395
Email: ussupport@veritysystems.com
Open PST Time

APPENDIX A: Using other Graphics Software Packages

CorelDRAW & Photoshop

While Discus offers a quick and easy method for designing CDs, if greater control & more flexibility is what you need, you may wish to use a package such as Photoshop or CorelDRAW to design your discs.

Create A Page

If you wish to use CorelDRAW or Photoshop graphics software to create an image to print on the OptiPrinter PRO, we recommend you start by creating a page 120 mm x 120 mm in your design software.

Introducing the Mask

Unlike other CD & DVD printers on the market, the OptiPrinter PRO boasts a unique and easy to use mask, which makes the accurate printing of CDs from graphics software packages such as CorelDRAW & Photoshop easier than ever before.

The OptiPrinter PRO mask looks something like Fig. A. The shaded area represents the mask itself and through the use of the mask, the printer is prevented from printing an image onto this area.

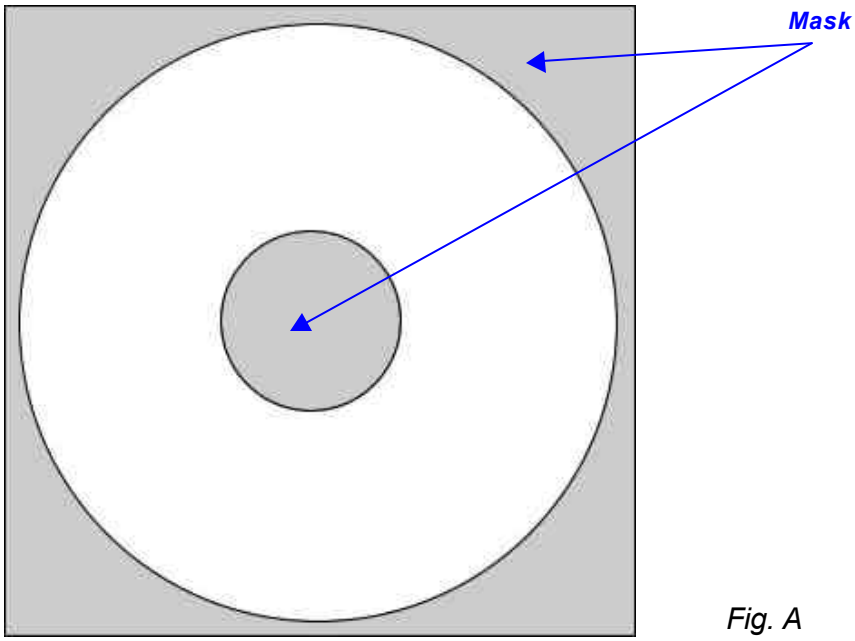


Fig. A

Understanding the Mask Interface

The OptiPrinter PRO mask interface, located in the Printer Preferences, looks like this:

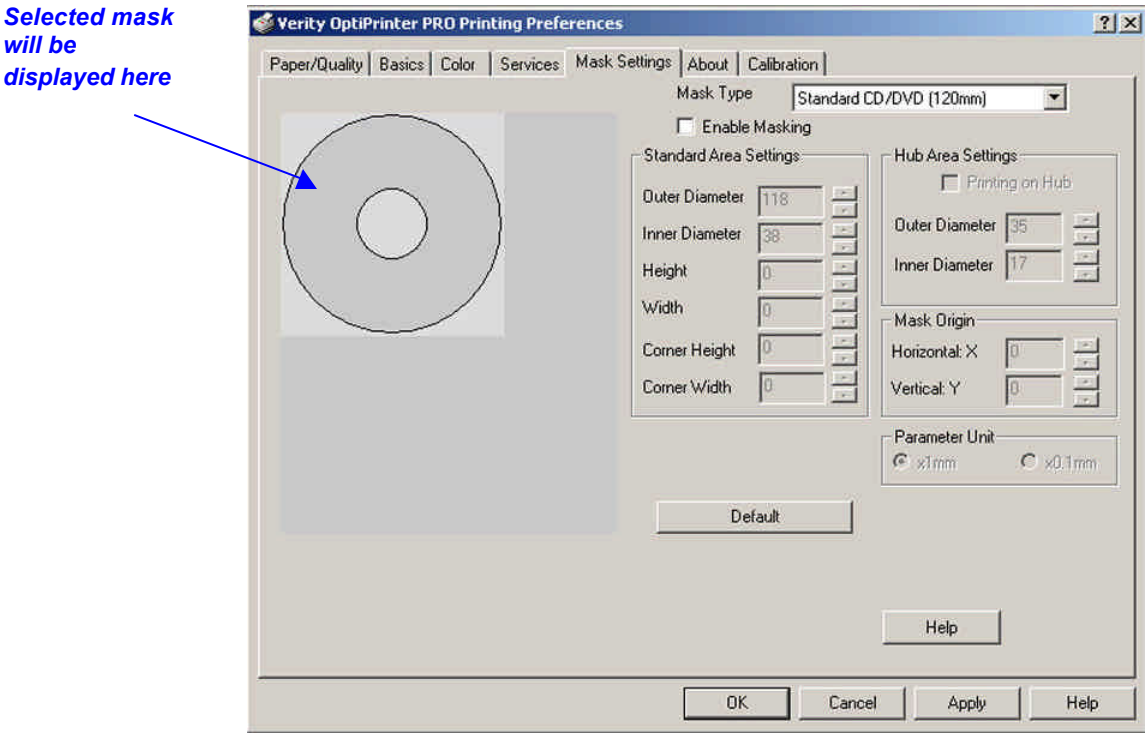


Fig. B

Using the mask, adjustments can be made to match exactly the size of media you wish to print. Each of the features included on the mask interface is described on the following pages:

Mask Type:

The OptiPrinter PRO has pre-determined masks for the following types of media:

- Standard CDs & DVDs (120mm)
- Business Card Round (63mm) (i.e. Saddle/Hockey)
- Business Card Round (61mm) (i.e. Saddle/Hockey)
- Business Card Round (58mm) (i.e. Saddle/Hockey)
- Business Card Rectangular (58mm)
- Business Card Rectangular (63mm)
- Mini CDs (80mm)

Select the media you wish to print from the drop down list and a picture of that mask will appear on the interface (see Fig. B).

Enable Mask:

Ensure this box is checked.

Standard Area Settings:

This feature allows you to adjust the print area of the mask. You can amend the following dimensions:

Outer Diameter – Can be used when printing standard 120mm CDs & DVDs and Mini Ds

Note:

The maximum print area for a CD is 120mm in diameter. The mask will not accommodate and the printer will not print beyond this diameter.

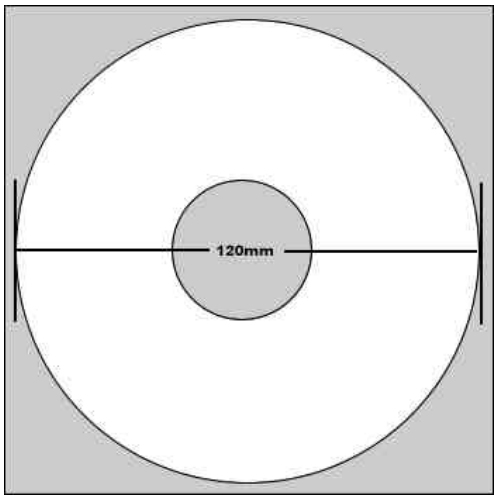


Fig.C

However, this outer diameter can be reduced to accommodate the slightest variation in printable media.

Inner Diameter:	This can be increased or decreased in size
Height:	To adjust the height of the mask for CD business cards
Width:	To adjust the width of the mask for CD business cards
Corner Height:	To adjust the corner height of the mask for CD business cards
Corner Width:	To adjust the corner width of the mask for CD business cards

Hub Area Settings:

To print on the hub of your chosen media, first check the “Printing on Hub” checkbox as shown in Fig. D.

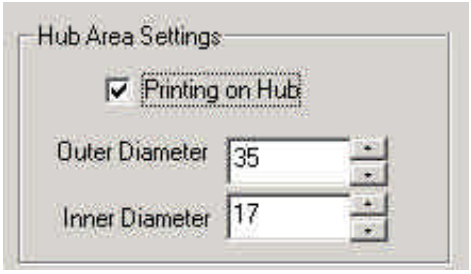


Fig. D

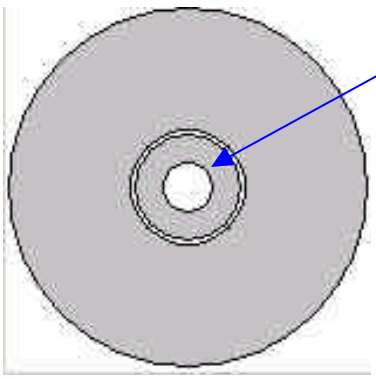


Fig. E

The mask interface displays the hub.
Once again the **Outer** & **Inner** diameters of the hub can be adjusted to fit your media's requirements exactly. See Fig. B.

Mask Origin:

The Calibration tab should be used to align your print image with the CD, however, the masks origin can also be used to more the position of the image by entering values in the X & Y axis.

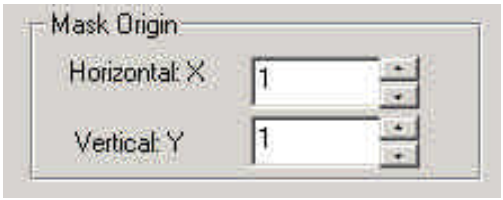


Fig. F

As you will see from the above diagram (Fig. F), the maximum distance you can move the mask is 1mm in any direction. It is therefore advisable to change the unit of parameter from x 1mm to x0.1mm as shown below in Fig. G This way, tiny movements can be made to align the mask perfectly.

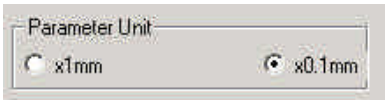
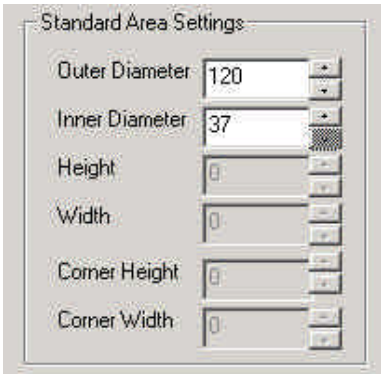


Fig. G

Parameter Unit:

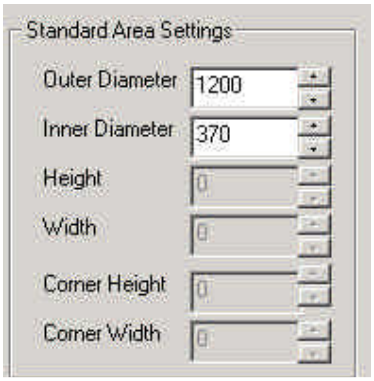
As mentioned above, the parameter unit can be changed from x1 mm to x 0.1 mm movements allowing you to adjust your mask by tiny increments at a time so that a perfect mask can be achieved.

Changing this setting to x 0.1mm will result in all measurements on the Mask interface being shown as tenths of a millimeter as shown in Fig. H



Parameter Unit = x1mm

Fig. H



Parameter Unit = x0.1mm

Templates:

To help you position your images correctly in either CorelDRAW 11 or Photoshop7, templates are included on the CD enclosed.

These templates should be used as guides as to where to position your graphics in relation to the media you wish to print.

APPENDIX B: RECOMMENDATIONS

Positioning your OptiPrinter PRO

- Ensure your OptiPrinter PRO is placed on a flat surface.
- Ensure there is sufficient ventilation around your printer.
- Avoid places subject to dust, moisture & vibrations.

Maintaining your Printer

- **DO NOT** force the print cartridge cradle – always follow the correct procedures for changing ink cartridge (see section 5).
- **DO NOT** manually force the CD tray into the printer
- From time to time the CD tray of the OptiPrinter PRO may collect deposits of ink where an image has printed directly onto the CD tray. To clean the tray simply wipe with a moist cloth.
- **DO NOT** put your hand or any other object inside the printer while it is printing.
- **DO NOT** spill liquid onto the printer

Getting the Most out of Your OptiPrinter PRO

- If you wish to print photo-quality graphics onto your CDs & DVDs, the higher the input the higher the output.
- Use jpegs, tiff files that are 300dpi resolution

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